Why Create Healthy Communities? Research Evidence

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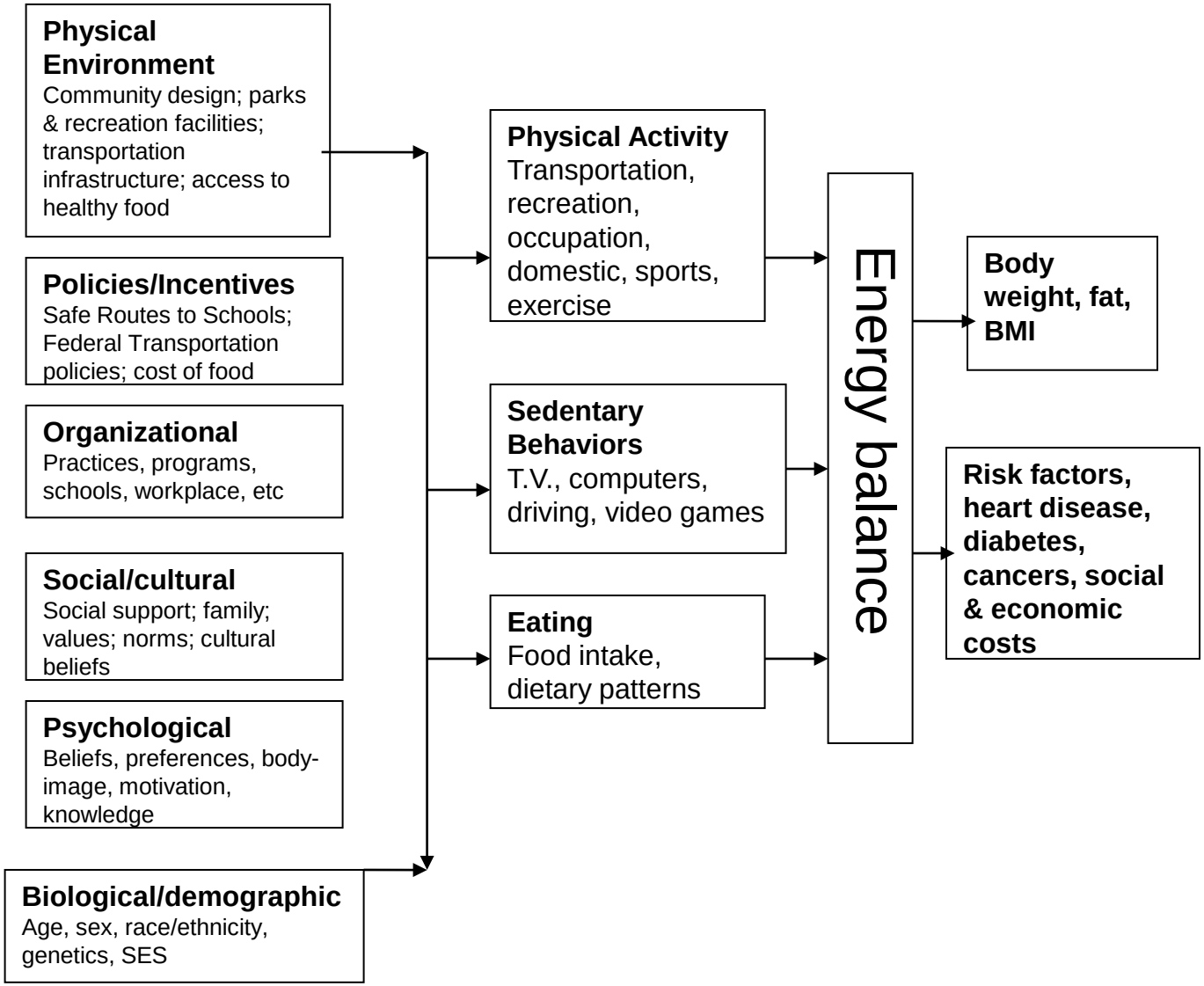
Snohomish County Healthy Communities by Design for All Ages
September 2009

Socio-ecological model of obesity



State & Federal (policy)
Community & school
Parenting and home
Individual risk factors
Weight status, health behaviors

Evidence on Children & Healthy Communities

NIK Study Design

		Physical Activity Environment	
		High	Low
Nutrition environment	High	High PAE/High NE environment - high walkable - good park availability/quality - healthy food environment	Low PAE/High NE environment - low walkable - poor park availability/quality - healthy food environment
	Low	High PAE/Low NE environment - high walkable - good park availability/quality - unhealthy food environment	Low PAE/Low NE environment - low walkable - poor park availability/quality - unhealthy food environment

Combining Walkability & Park Quality

- High physical activity environment

  High PAE = high walkable + high quality parks

- Low physical activity environment

  Low PAE = low walkable + no parks

E John ST
E John
WELLS FARGO
SAFEWAY
Seattle
Asian Art
Museum

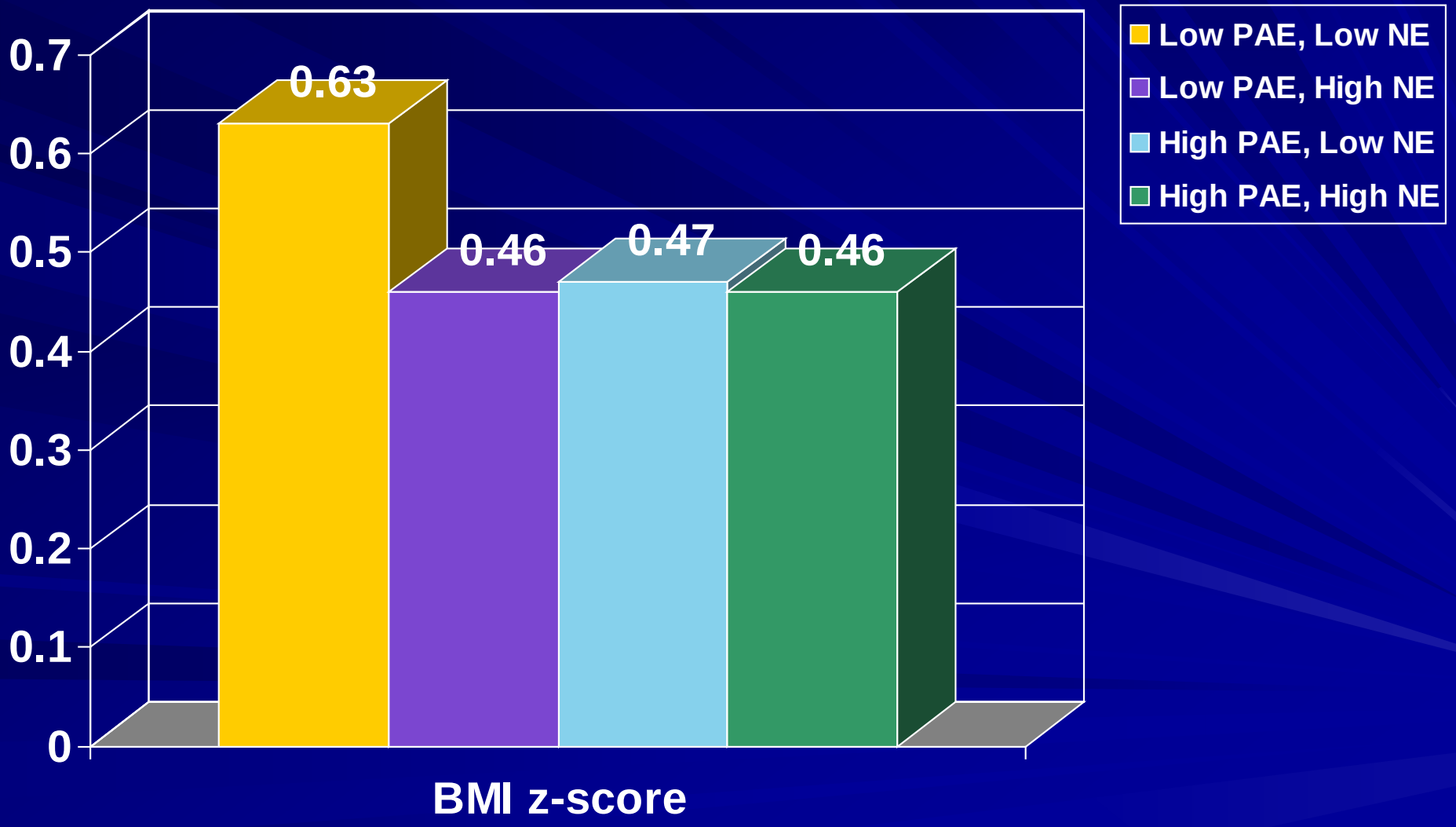
Neighborhood Nutrition Evaluation

- Food establishments within and within ½ mile buffer of block group
- High nutrition
  - At least one supermarket and
  - 15 or fewer fast food establishments
- Low nutrition
  - No supermarket

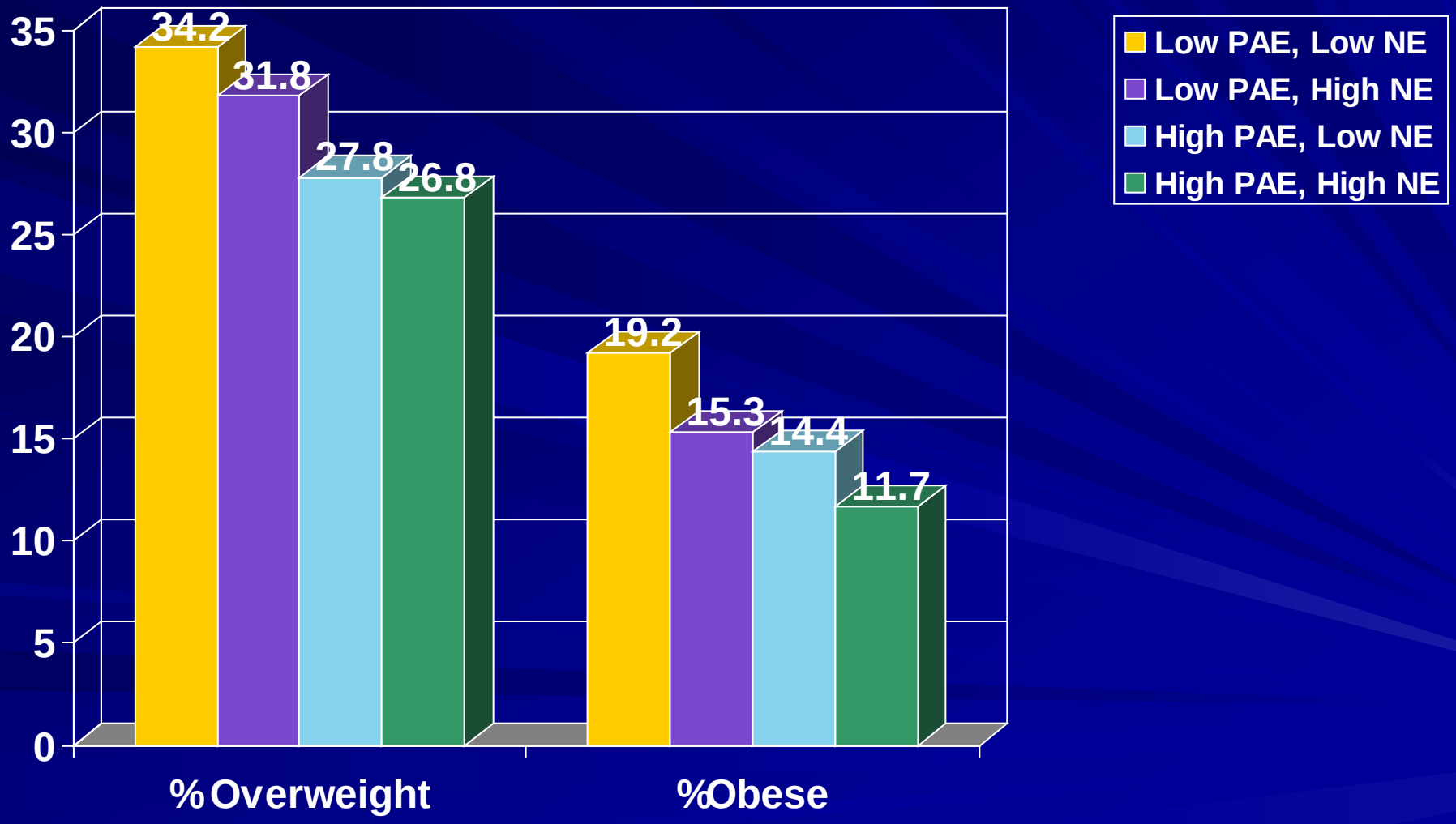
    OR
  - A supermarket but
  - 16 or more fast food establishments

$6.59
1,190–1,430 Cal
$5.99
1,220–1,460 Cal
$6.69
1,460–1,700 Cal
$7.29
1,700–1,940 Cal
NEW
ANGRY
WHOPPER

Child BMI z-score (By Neighborhood Type)



Child Overweight and Obesity (By Neighborhood Type)

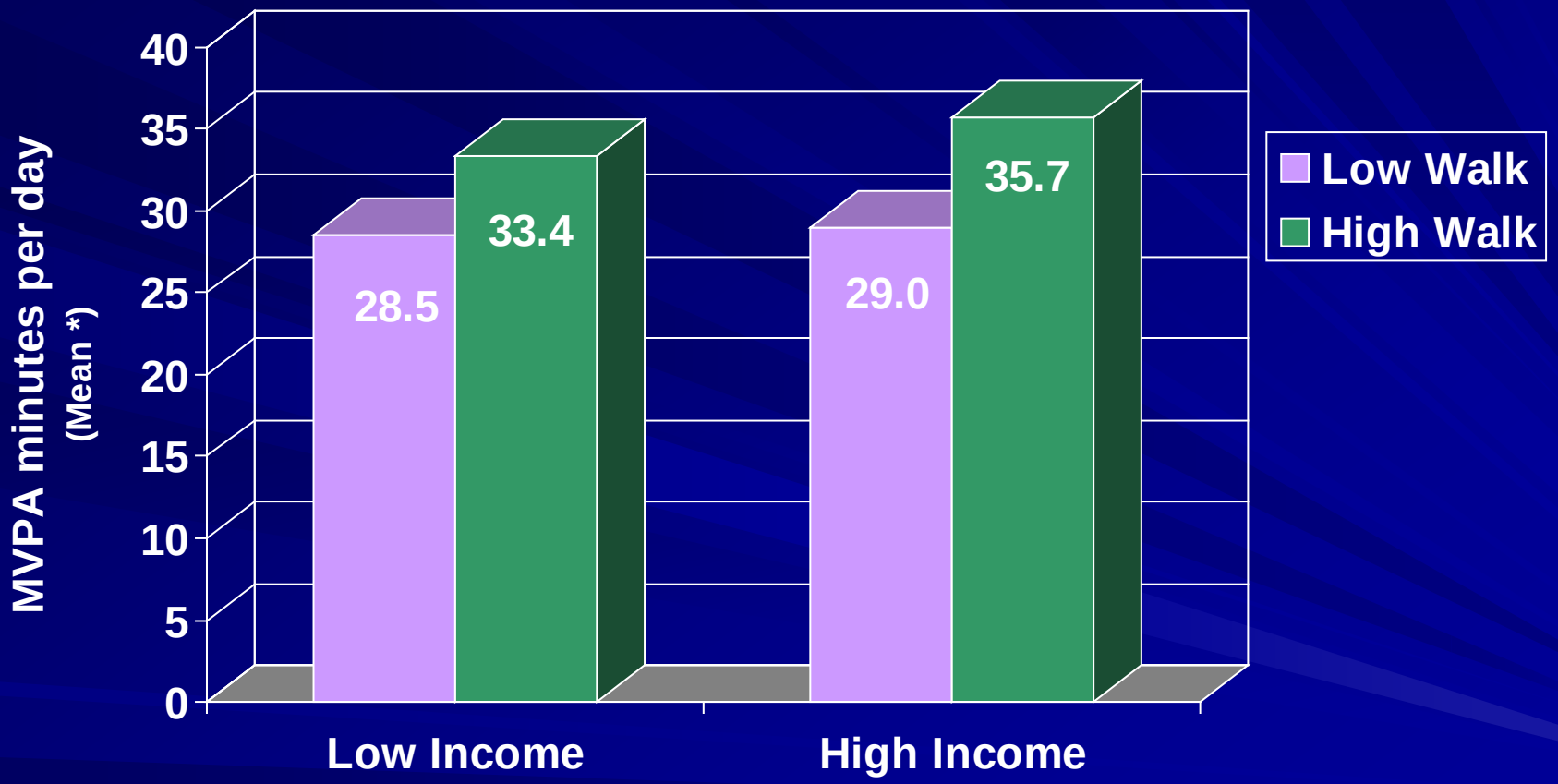


Evidence on Adults & Healthy Communities

NQLS Neighborhood Categories

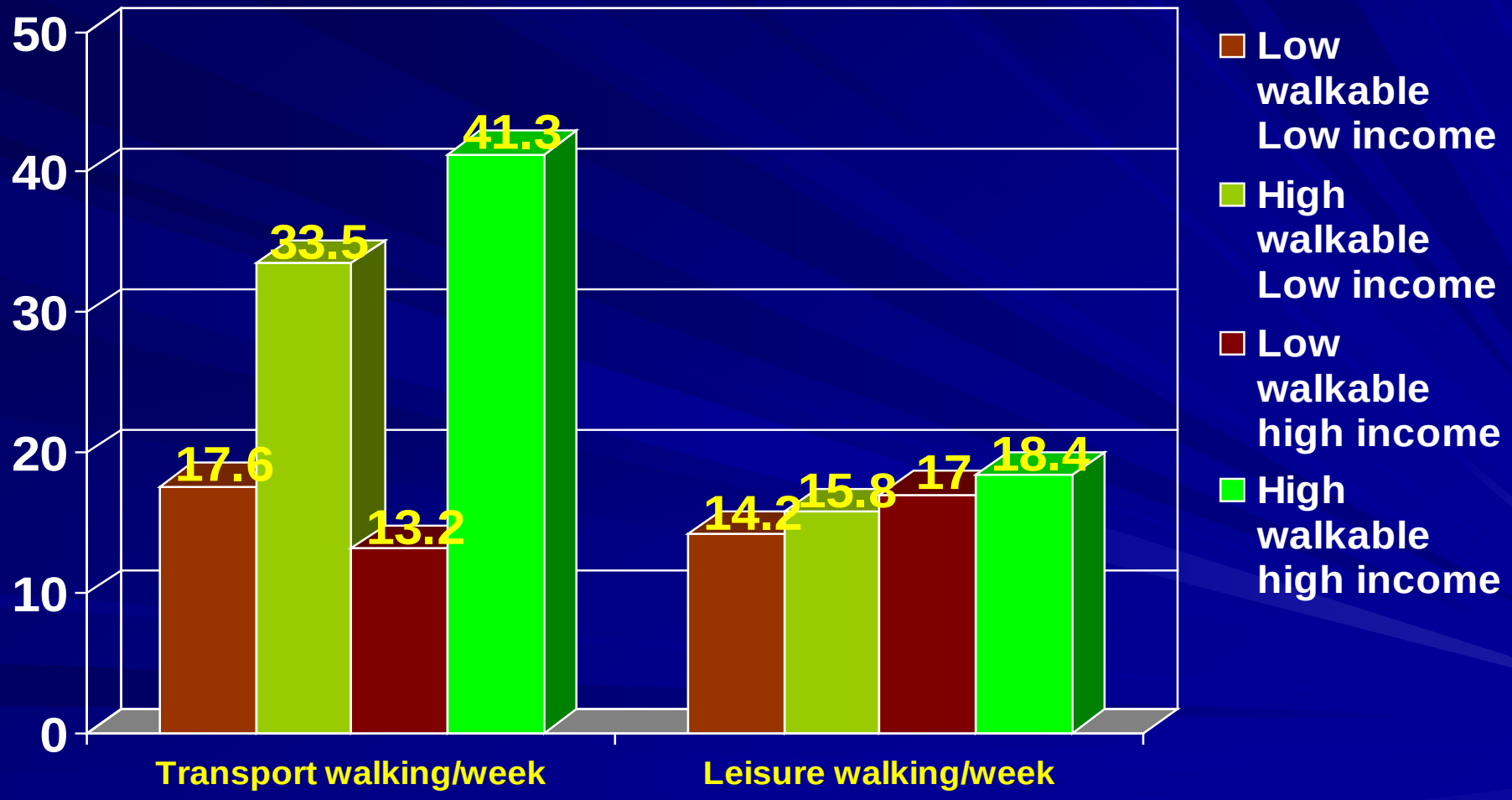
Socioeconomic Status	Walkability: Low	Walkability: High
Low	4 per region	4 per region
High	4 per region	4 per region

NQLS Study: Self-Reported Physical Activity



* Adjusted for neighborhood clustering, gender, age, education, ethnicity, # motor vehicles/adult in household, site, marital status, number of people in household, and length of time at current address.

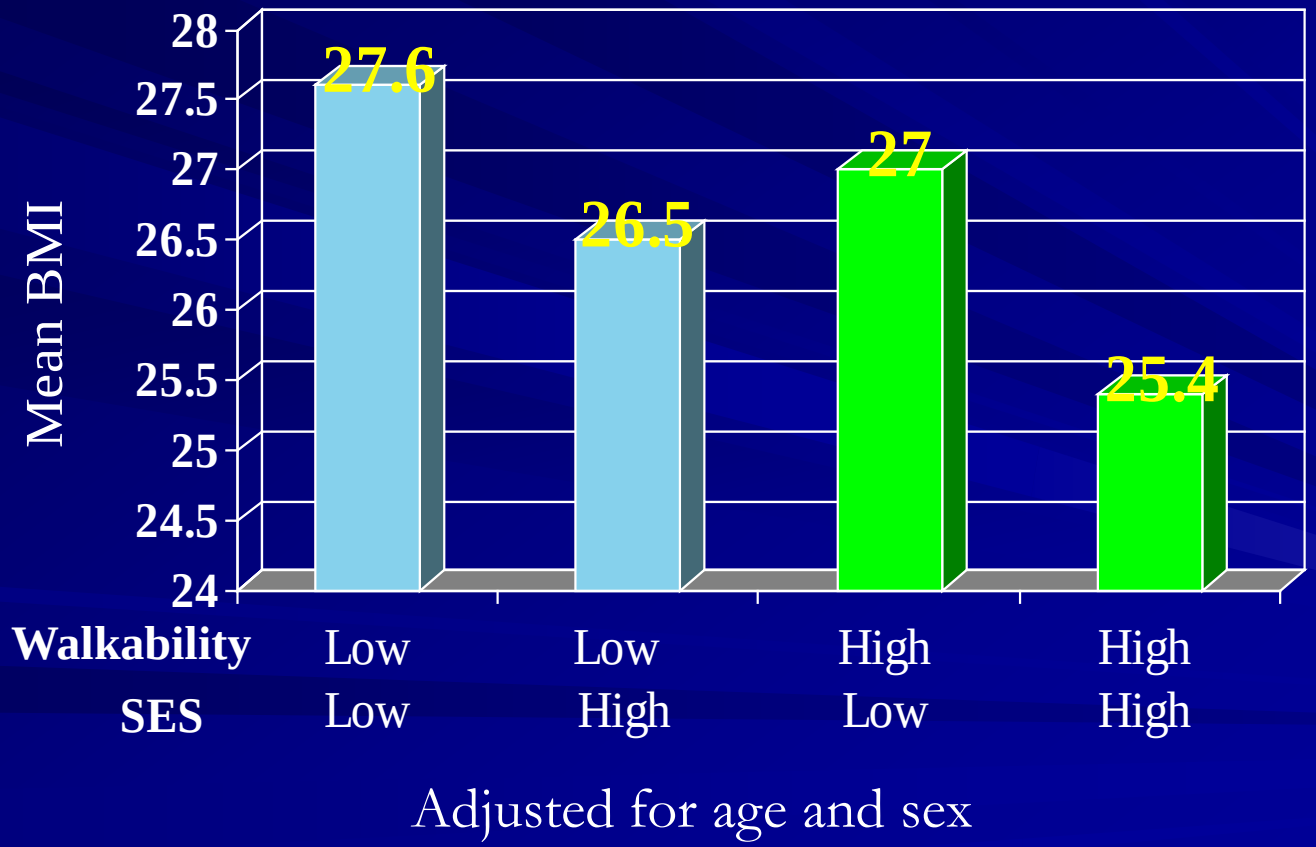
NQLS Study: Self-Reported Physical Activity



Adjusted for ‘reasons for moving’, sex, age, education, ethnicity, marital status, vehicles in household; neighborhood clustering

Sallis et al 2009 SSM

Body Mass Index (BMI)



Adjusted for age and sex

Neighborhood Quality of Life Study

Built Environment - Walking Associations among Published 2005/2006 articles (Adults)

	Transport walking	Recreation walking
Density	+ (80%)	? (25%)
Distance to destinations	- (78%)	? (20%)
Land-use mix	+ (85%)	? (43%)
Street connectivity	? (50%)	? (0%)
Pedestrian infrastructure	? (25%)	+ (67%)
Traffic	? (25%)	? (14%)
Personal safety	? (43%)	? (43%)
Parks/open space	? (40%)	? (0%)
Aesthetics	? (17%)	+ (100%)

Evidence-based Recommendations

- Implement strategies that bring people closer to desired destinations
- Change the balance of facilitators/barriers to active transportation
  - Improve walking/biking infrastructure
  - Disincentivize driving alone
- Increase healthy food access while addressing costs
- http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm for Community Strategies and Measurements to Prevent Obesity